Hepatitis C

(Previously known as Non-A, Non-B Hepatitis and HCV Infection)



A. Etiologic Agent

Hepatitis C is caused by an RNA virus (in the *Flaviviridae* family). Multiple hepatitis C virus (HCV) genotypes exist, with type 1 being most common in the U.S.

B. Clinical Description

Of people with recent infection with HCV, only about 20% will experience any related acute symptoms. Therefore, it is uncommon for people to be diagnosed with HCV infection in the acute stage. About 15–25% of HCV-infected individuals recover spontaneously (reasons for this are still unknown); the rest develop chronic infection. Hepatitis C is a disease with varying rates of progression. In general, however, its course is slowly progressive.

Most people are asymptomatic during the first decade or two of chronic HCV infection. Some patients will experience a range of symptoms including fatigue, headache, joint aches, muscle aches, nausea, jaundice, loss of appetite, and/or abdominal pain. Of those chronically infected, about 10–20% may eventually develop cirrhosis. Cirrhosis can lead to liver failure in some people and can predispose people to the development of liver cancer. *Attachment A: Chronology of Hepatitis C Virus (HCV) Infection Progression*, at the end of this chapter, illustrates the natural progression of HCV infection. Factors related to more serious clinical outcomes include: drinking alcohol; coinfection with hepatitis A or hepatitis B virus, or with HIV; and medications or food supplements that harm the liver.

Treatment of chronic HCV infection with pegylated interferon and ribavirin is indicated for some individuals and may result in a sustained response with elimination of virus in 42–46% of individuals infected with HCV genotype 1 who receive 12 months of treatment.

C. Vectors and Reservoirs

Humans are the only known reservoir of this virus.

D. Modes of Transmission

HCV is a bloodborne pathogen that is predominantly spread via exposure to contaminated blood or blood products. Currently, the most prevalent mode of transmission is sharing needles or syringes to inject drugs. Blood transfusions pose an extremely limited risk now, but for patients who received a blood transfusion prior to June 1992, the risk of infection was approximately 1.5% per transfusion recipient. Sexual transmission of HCV does occur, but does not appear to be efficient. Other potential risks for transmission include long-term hemodialysis, sharing straws for intranasal cocaine use, vertical (mother to infant) transmission, occupational blood exposure, and tattooing or body piercing with non-sterile equipment. HCV is not spread through casual contact, kissing, sneezing, hugging, sharing glasses or utensils, or breast milk.

E. Incubation Period

The incubation period for HCV ranges from 2 weeks to 6 months, with an average incubation period of 6–7 weeks.

F. Period of Communicability or Infectious Period

Infectiousness with HCV is variable; anyone with a positive test for HCV antibody should be considered infectious. The virus can usually be detected by the presence of viral RNA in an infected person's blood within 1–3 weeks after the initial exposure. The degree of correlation between quantity of circulating virus and infectiousness is not clearly established.

G. Epidemiology

HCV has a worldwide distribution. In the U.S., an estimated 4 million people are infected with HCV; it is thought that there are currently about 30,000 new cases of HCV infection each year. HCV infection occurs among persons of all ages, with the highest incidence of acute HCV infection (new cases) occurring among persons aged 20–39 years. Prevalence is highest among groups with specific risk factors, especially injection drug users, patients with hemophilia or on long-term hemodialysis, prison inmates, and people who received blood or organ products prior to June 1992. The risk of occupational exposure for health care workers has been estimated to be 1.8% per incident of hollow-bore needlestick exposure to HCV-infected blood. The risk of perinatal transmission is estimated to be about 5%, although if the mother is co-infected with HIV, the risk may be approximately 15–25%.

Recently, there has been a sharp increase in *reporting* of HCV infection in Massachusetts. Most of these newly reported cases are not people with new (acute) disease but those with chronic infection who have been newly diagnosed. There remains a large population of undiagnosed people who were infected in the past.

H. Bioterrorist Potential

This pathogen is not considered to be of risk for use in bioterrorism.



Section 2:

REPORTING CRITERIA AND LABORATORY TESTING

A. What to Report to the Massachusetts Department of Public Health (MDPH)

Acute Hepatitis C (Reportable to LBOH)

Report any case with the following laboratory findings:

- ◆ **ALL** of the following:
 - Serum alanine aminotransferase levels >7 times the upper limit of normal; AND
 - Immunoglobulin M (IgM) anti-HAV negative (if done); AND
 - IgM anti-HBc negative, or if not done, HBsAg negative; AND
 - Antibody to HCV (anti-HCV) positive (repeat reactive) by enzyme immunoassay (EIA), verified by an additional, more specific assay (e.g., RIBA™ for anti-HCV or nucleic acid testing for HCV RNA).

Chronic Hepatitis C (Reportable Directly to MDPH)

- ♦ Anti-HCV positive (repeat reactive) by screening immunoassay with a signal to cut-off ratio predictive of a true positive, as determined for the particular assay (e.g., \geq 3.8 for EIA); OR
- ◆ Antibody to HCV (anti-HCV) positive (repeat reactive) by enzyme immunoassay (EIA), verified by an additional, more specific assay (e.g., RIBA™ for anti-HCV or nucleic acid testing for HCV RNA), if done.

Note: Please consult with the HCV epidemiologist at the MDPH Division of Epidemiology and Immunization at (617) 983-6800 or (888) 658-2850 for assistance in interpreting laboratory results or if you have any other questions regarding a case of HCV infection.

Note: See Section 3C for information on how to report an acute case of HCV infection.

B. Laboratory Testing Services Available

The MDPH State Laboratory Institute (SLI) does not provide routine HCV antibody testing for the general public. Testing is generally conducted through hospital and commercial clinical laboratories.



Section 3:

REPORTING RESPONSIBILITIES AND CASE INVESTIGATION

A. Purpose of Surveillance and Reporting

- To provide information to HCV-infected persons on how to prevent exposing others.
- ◆ To identify HCV-infected patients to ensure that they are educated on why medical evaluation is needed and how to reduce disease progression, and to provide referrals to medical or support services.
- ◆ To determine the prevalence of HCV in specific populations and geographic locations to help inform HCV prevention and service activities.
- ◆ To identify clusters of cases or outbreaks, in particular, those that appear to involve health care-associated transmission.

B. Laboratory and Health Care Provider Reporting Requirements

Acute Cases

Acute cases of HCV infection are reportable to the local board of health (LBOH). The MDPH requests that health care providers immediately report to the LBOH in the community where the case is diagnosed, all confirmed acute cases of HCV infection, as defined by the reporting criteria in Section 2A.

Note: If a health care provider is reporting an acute case, ask the provider to inform the patient that someone from the LBOH will be contacting him/her for follow-up.

Chronic/Non-acute cases

Chronic and non-acute cases of HCV infection are reportable directly to the MDPH. Health care providers diagnosing HCV infection (past or present) are required to complete a case report form and to submit it to MDPH. The MDPH will provide case information to the LBOH on a regular basis.

Laboratories performing examinations on any specimens derived from Massachusetts residents that yield evidence of HCV infection shall report such evidence of infection directly to the MDPH within 24 hours.

C. Local Board of Health (LBOH) Reporting and Follow-Up Responsibilities

Reporting Requirements

MDPH regulations (105 CMR 300.000) stipulate that acute HCV infection is reportable to the LBOH and that each LBOH must report any acute case of HCV infection, as defined by the reporting criteria in Section 2A. Cases should be reported to the MDPH Bureau of Communicable Disease Control, Office of Integrated Surveillance and Informatics Services (ISIS) using a MDPH Hepatitis C (Acute) Case Report Form (found at the end of this chapter). Refer to the Local Board of Health Timeline at the end of this manual's Introduction section for information on prioritization and timeliness requirements of reporting and case investigation.

Note: As of May 1, 2005, it is no longer a requirement for LBOH to investigate and report non-acute cases of HCV infection. This responsibility rests with laboratories and health care providers. However, a LBOH may choose to continue to investigate non-acute cases of HCV infection within its jurisdiction. The MDPH will forward a line listing of non-acute cases of HCV infection to the appropriate LBOH on a monthly basis.

Case Investigation

- 1. It is the responsibility of the LBOH to complete a MDPH *Hepatitis C (Acute) Case Report Form* (found at the end of this chapter) by interviewing the case and others (such as the diagnosing health care provider) who may be able to provide pertinent information. Much of the information required on the form can be obtained from the health care provider or from the medical record.
- 2. Please see the *LBOH Action Steps* checklist at the end of this chapter for assistance with investigation of acute HCV cases. It suggests a sequence for investigation, recommended elements of investigation, and information that should be reviewed with each case. This checklist is for LBOH use only. It is not required and does not need to be submitted with the case report form. The LBOH may wish to keep it on file to document the investigation.
- 3. Use the following guidelines to assist in completing the MDPH *Hepatitis C (Acute) Case Report Form*:
 - a. Begin the investigation by contacting the diagnosing health care provider to verify the diagnosis. This will ensure that the health care provider has an opportunity to provide the test results to the case before you contact him/her.
 - b. If the health care provider cannot be reached, leave a message indicating that the LBOH will be contacting the case, and the case should be informed of the diagnosis or test results. A minimum of one week should be allowed for the health care provider to get in touch with the patient. If the report came from a laboratory and the health care provider is not known, contact the laboratory prior to contacting the patient in order to identify which specific tests were used for the diagnosis. See *Attachment B: Sample Letter for Contacting Health Care Providers for Acute Hepatitis C Case Investigation* and *Attachment C: Sample Letter for Contacting Cases for Acute Hepatitis C Case Investigation*.
 - c. Accurately record all demographic information indicated on the form.
 - d. Be sure to accurately record the date of diagnosis, whether this is a new diagnosis, which related laboratory work was performed, demographic information, and risk-related information (e.g., the ways in which the case may have been exposed to HCV). If possible, document when the person may have been infected (e.g., indicate if the original exposure occurred recently or years ago).

- e. Record all available clinical information, including diagnosis and onset dates, symptoms, and clinician contact information.
- f. Record and attach all copies of diagnostic laboratory information. This includes liver function tests and tests for hepatitis A and hepatitis B, as well as HCV screening tests (e.g., EIA, ELISA), supplementary tests (e.g., RIBA™), and PCR. If the laboratory test information comes from the medical provider and you do not have a hard copy of the test results, indicate in the "Comments" section at the end of the case report form that laboratory results were provided or confirmed by the health care provider.
- g. Record the patient's risk history. Some questions on the case report form are quite personal and should be asked in a sensitive manner. Ask questions about sexual behavior and drug use to determine potential sources of transmission. Ask about alcohol use to identify if health education is needed and to assess for other possible causes of liver damage. The "Comments" section can be used to communicate any relevant information about the case to the MDPH, including investigation information (e.g., attempts to contact individual).
- h. Reassure the patient that all information is kept strictly confidential. For all of the risk-related questions on the case report form, it is essential that no assumptions be made about the case's risk. Get the information concretely from the individual or from the health care provider(s), or indicate that the risk is unknown for that case. LBOH responsibility in working with the individual or health care provider extends only to obtaining the information, where possible, and providing related health education.
- Educate the patient about preventing transmission and ways to protect her/his liver. Encourage him/her to speak to people who may have been exposed to his/her blood since the time he/she is estimated to have been exposed, infected, or seroconverted.
- j. If you have made several attempts to obtain case information but have been unsuccessful (e.g., the case or health care provider does not return your calls or respond to a letter, or the case refuses to divulge information or is too ill to be interviewed), please fill out the form with as much information as you have gathered. Please note on the form the reason(s) why it could not be filled out completely.
- 4. After completing the form, attach laboratory report(s) and fax or mail (in an envelope marked "Confidential") to ISIS. The confidential fax number is (617) 983-6813. Call ISIS at (617) 983-6801 to confirm receipt of your fax. The mailing address is:

MDPH, Office of Integrated Surveillance and Informatics Services (ISIS)

305 South Street, 5th Floor Jamaica Plain, MA 02130

Fax: (617) 983-6813

5. Institution of disease control measures is an integral part of case investigation. It is the responsibility of the LBOH to understand, and if necessary, institute the control guidelines listed in Section 4.

Section 4:

CONTROLLING FURTHER SPREAD

A. Isolation and Quarantine Requirements (105 CMR 300.200)

Minimum Period of Isolation of Patient

No restrictions except for exclusion from organ and blood donation and counseling to modify activities in order to prevent transmission.

Note: Sexual transmission of HCV does occur, but it does not appear to be efficient. Although not currently required, the MDPH also recommends that cases be advised against semen or egg donation.

Minimum Period of Quarantine of Contacts

Personal surveillance for high-risk contacts. (Personal surveillance is defined as the practice of close medical or other supervision of contacts without restricting their movement, in order to promote recognition of infection or illness.)

B. Protection of Contacts of a Case

Standard precautions for cases are recommended to prevent exposing others to blood and body fluids. IG prophylaxis is not effective and is not recommended for contacts of HCV-infected individuals.

C. Managing Special Situations

There are no specific regulations regarding HCV infection in daycare, school, or community residential programs. HCV is not spread via casual contact or through food or water. As long as standard precautions are maintained, HCV will not be spread to others in these settings. No one who is HCV-infected should be excluded from attending or working in any of these settings on the basis of his/her HCV infection.

D. Preventive Measures

The role of the LBOH in managing HCV is largely to educate infected persons on how to care for themselves and how to avoid spreading infection to others. Little epidemiologic investigation is required except data collection for case reports. Prevention and education includes providing information on how the disease is transmitted, how to avoid transmitting it, and how patients can protect themselves from other potential sources of liver damage.

Offer the information and support below to newly identified cases:

- Provide basic instruction on transmission of HCV and emphasize the need for ongoing medical evaluation.
 Treatment is available and the case should be referred to his/her health care provider for a discussion of treatment options.
- If the patient is a current injection drug user, provide referrals to drug treatment and needle exchange programs. This will help prevent the spread to other individuals.
- Educate the case on the need to abstain from alcohol to help protect the liver. If a case needs or wants support to stop drinking, provide referrals to appropriate treatment or support services.

- Discuss medications that should be avoided (e.g., acetaminophen) as high doses can damage the liver. All cases should discuss medications (including over-the-counter medications), and dietary supplements and herbs, with a health care provider to be certain that they will not damage their livers.
- ◆ Determine if case is at risk for either hepatitis A or B. If so, provide information on hepatitis A and hepatitis B immunization. (Refer to the *Hepatitis A* and *Hepatitis B* chapters in this manual for more information.)
- Discuss sexual transmission of HCV. Indicate that HCV may be transmitted during sex. All contact with blood during sex should be avoided. Emphasize latex barrier protection as a way to prevent the spread of HCV as well as a way to prevent exposure to and transmission of other pathogens.
- Discuss household transmission of HCV. Household transmission is rare, but to ensure that it does not happen, the case should not share razors, toothbrushes, nail clippers, or any other item that could be contaminated with blood.
- Inform the case that he/she should not be restricted from working, preparing food, or taking part in his/her daily activities unless he/she has specific symptoms that make it difficult to do so. There are no recommendations suggesting that HCV-infected persons should change their exercise routines or have any dietary restrictions.

A Hepatitis C Public Health Fact Sheet is available from the MDPH Division of Epidemiology and Immunization or on the MDPH website at www.mass.gov/dph. Click on the "Publications and Statistics" link, and select the "Public Health Fact Sheets" section under "Communicable Disease Control."



ADDITIONAL INFORMATION

The following are the formal CDC case definitions for acute HCV infection and chronic HCV infection (past or present). They are provided for your information only and should not affect the investigation or reporting of a case that fulfills the criteria in Section 2A of this chapter. (The CDC and the MDPH use the CDC case definitions to maintain uniform standards for national reporting.) For reporting to the MDPH, always use the criteria outlined in Section 2A.

Note: The most up-to-date CDC case definitions are available on the CDC website at www.cdc.gov/epo/dphsi/casedef/case_definitions.htm.

Acute HCV Infection

Clinical Criteria

An acute illness with:

- ◆ Discrete onset of symptoms consistent with acute viral hepatitis; and
- ◆ Jaundice or elevated serum aminotransferase levels.

Laboratory Criteria

- ◆ **ALL** of the following:
 - Serum alanine aminotransferase levels >7 times the upper limit of normal;

- IgM anti-HAV negative (if done);
- IgM anti-HBc negative, or if not done, HBsAg negative; and
- Antibody to HCV (anti-HCV) positive (repeat reactive) by EIA, verified by an additional, more specific assay (e.g., RIBA™ for anti-HCV or nucleic acid testing for HCV RNA).

OR

♦ Anti-HCV positive (repeat reactive) by screening immunoassay with a signal to cut-off ratio predictive of a true positive, as determined for the particular assay (e.g., \geq 3.8 for EIA).

OR

◆ Anti-HCV positive by RIBA™ alone.

OR

HCV RNA positive.

Case Classification

Confirmed

A case that meets the clinical case definition and is laboratory-confirmed.

Comment

- ◆ Up to 10% of cases of acute HCV infection will be anti-HCV negative when tested initially because some have not yet seroconverted, and others (<3%) remain negative even with prolonged follow-up.
- Available serologic tests for anti-HCV do not distinguish between acute and chronic or past infection. Thus, other
 causes of acute hepatitis should be excluded for anti-HCV positive patients who have an acute illness compatible with
 hepatitis.
- ◆ The diagnosis of HCV infection can be made by detecting HCV RNA using gene amplification techniques (e.g., RT-PCR). However, a negative HCV RNA test result does not exclude the possibility of HCV infection.

Note: This case definition was approved by the Council of State and Territorial Epidemiologists (CSTE) in June, 2003. It has been updated from the previously published case definition.

HCV Infection (Past or Present)

Clinical Criteria

None. Most HCV-infected persons are asymptomatic. However, many have chronic liver disease, which can range from mild to severe, including cirrhosis and/or liver cancer.

Laboratory Criteria

One of the following:

- ◆ Anti-HCV positive (repeat reactive) by EIA, verified by an additional, more specific assay (e.g., RIBA™ for anti-HCV or RT-PCR for HCV RNA).
- ◆ Anti-HCV positive (repeat reactive) by EIA with average signal to cut-off ratio ≥3.8.
- ◆ Anti-HCV positive by RIBA™ alone.

◆ HCV RNA positive.

Case Classification

Probable	A case that is anti-HCV positive (repeat reactive) by EIA but has not been verified by an additional, more specific assay, or the signal to cut-off ratio is unknown.
Confirmed	A case that has been laboratory-confirmed.

REFERENCES

American Academy of Pediatrics. [Hepatitis C.] In: Pickering L.K., ed. *Red Book: 2003 Report of the Committee on Infectious Diseases, 26th Edition.* Elk Grove Village, IL, American Academy of Pediatrics; 2003: 336–340.

CDC. Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease. *MMWR*. 1998; 47(RR-19).

"Guidelines for Viral Hepatitis Surveillance and Case Management." <u>Centers for Disease Control and Prevention</u>. Atlanta, GA, January 2005.

<www.cdc.gov/ncidod/diseases/hepatitis/resource/PDFs/revised_guidelines_formatted5.pdf>.

Heymann, D., ed. *Control of Communicable Diseases Manual, 18th Edition*. Washington, DC, American Public Health Association, 2004.

Management of Hepatitis C: 2002. NIH Consensus Statement. June 2002, 10–12; 19(3): 1–46.

MDPH. Regulation 105 CMR 300.000: Reportable Diseases, Surveillance, and Isolation and Quarantine Requirements. MDPH, Promulgated November 4, 2005.

ATTACHMENTS

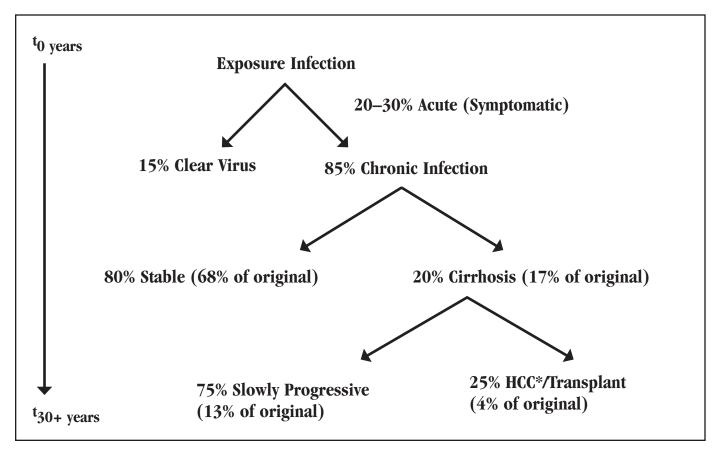
Attachment A: Chronology of Hepatitis C Virus (HCV) Infection Progression

Attachment B: Sample Letter for Contacting Health Care Providers for Acute Hepatitis C Case Investigation

Attachment C: Sample Letter for Contacting Cases for Acute Hepatitis C Case Investigation

Attachment A

Chronology of Hepatitis C Virus (HCV) Infection Progression



^{*} HCC = Hepatocellular Carcinoma, or liver cancer.

Source: Adapted from the Centers for Disease Control and Prevention. Recommendations for the Prevention and Control of Hepatitis C Infection. *MMWR*. 1998.

Attachment B

Sample Letter for Contacting Health Care Providers for Acute Hepatitis C Case Investigation

(Print on LBOH Letterhead)

[Date]
[Name of health care provider]
[Address]

Dear [Title and name of provider]:

I am writing to you in regard to your patient, [name of patient]. The [name of town/city] Board of Health recently received notice that this patient may have been diagnosed with hepatitis C.

As you are aware, hepatitis C is a reportable condition in Massachusetts, and this requires the confirmation of each case of hepatitis C. The board of health contacts the patient to gain more information and to provide education, referral, and support. In order to do this, I would like to speak with you regarding the laboratory results and risk history of this patient. I have left several phone messages for you and have not been able to speak to you directly.

Massachusetts General Law (MGL) Chapter 111, Sections 6, 7, 111 and 112 give the Massachusetts Department of Public Health (MDPH) authority to define what diseases shall be regarded as dangerous to the public health and to require the reporting of such diseases. Under this authority, the MDPH has established regulations making certain diseases reportable to local boards of health (105 CMR 300.000: Isolation and Quarantine Regulations). These regulations outline reporting requirements and control measures that apply to both confirmed cases of such diseases and contacts of confirmed cases. The local board of health is required to collect information and to implement control measures.

The Privacy Rule of the Health Insurance Portability and Accountability Act (HIPAA) allows a covered entity to disclose Public Health Information (PHI) to a public health authority or to an agent of a public health authority, when the public health authority is authorized by law to collect or receive such information for the purpose of preventing or controlling disease, injury, or disability. This includes, but is not limited to, the reporting of disease, injury, vital events such as birth or death, and the conduct of public health surveillance, public health investigations, and public health interventions ($\S164.512(b)$).

Please contact me at your earliest convenience so that we may obtain the information required for this report. If it is more convenient for you to fill out the case report form on your own and send it to me, please feel free to do so. I have enclosed a copy of the form with this letter.

I would also like to remind you that since hepatitis C investigations include contacting the patient directly, it is strongly recommended that you contact the patient to discuss this diagnosis and inform him/her of the Board of Health investigation. I will be attempting to reach [name of patient] on or after [date 3 weeks from date on letter]. Please make an effort to provide the diagnosis to the patient prior to that time. If you would like more time for contacting the patient, please contact me, and I will be happy to set an alternate time. All of the information that we obtain from either you or your patient is STRICTLY CONFIDENTIAL.

I can be contacted at [your number(s) here], on [include any relevant schedule information]. I look forward to discussing this matter with you and will be happy to answer any questions that you may have regarding this investigation at that time.

Sincerely,

[Your name and signature]

[Dato]

Attachment C

Sample Letter for Contacting Cases for Acute Hepatitis C Case Investigation (Print on LBOH Letterhead)

[Name of case]
[Address]
Dear [Name of case]:
I am writing to you in regard to some recent laboratory test results that you should have received from your health care provider.
I work with the [name of town/city] Board of Health. As part of my job, I provide information and answer questions about certain diseases that health care providers are, by law, required to report to the Board of Health.* I would

I have left several phone messages for you and have not been able to speak to you directly. All of the information that we receive from you or from your health care provider is STRICTLY CONFIDENTIAL. The purpose of collecting this information is to assist in public health planning and to provide you with information that you might otherwise not receive.

like to speak with you about your recent laboratory tests to provide this information to you as well as to obtain some

Please contact me at your earliest convenience so that we may discuss this matter. If your health care provider has not yet discussed your test results with you, I would encourage you to make an appointment with him/her as soon as possible.

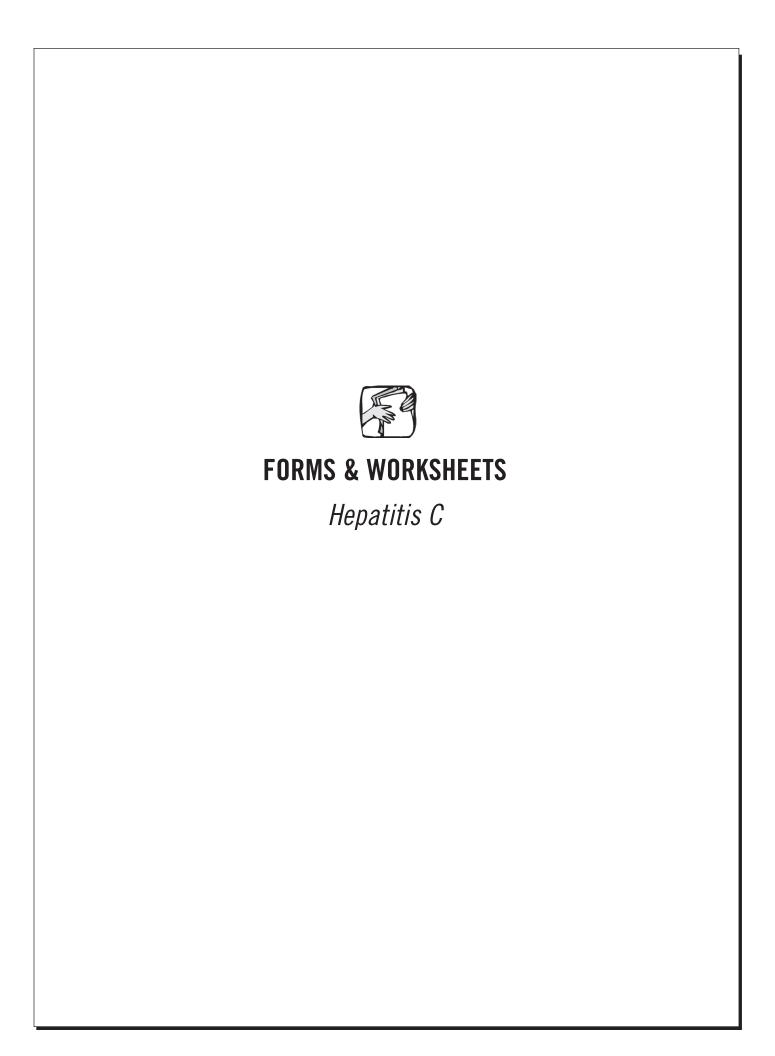
I can be contacted at [your number(s) here], on [include any relevant schedule information]. I look forward to discussing this matter with you and will be happy to answer any questions that you may have.

Sincerely,	
[Your name and signatu	re]

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additional information from you.

^{*} Massachusetts General Law (MGL) Chapter 111, Sections 6, 7, 111 and 112 give the Massachusetts Department of Public Health (MDPH) authority to define what diseases shall be regarded as dangerous to the public health and to require the reporting of such diseases. Under this authority the MDPH has established regulations making certain diseases reportable to local boards of health (105 CMR 300.000: Reportable Disease, Surveillance, and Isolation and Quarantine Regulations). These regulations outline reporting requirements and control measures that apply to both confirmed cases of such diseases and contacts of confirmed cases. The local board of health is required to collect information for the MDPH and to implement control measures.



Hepatitis C



LBOH Action Steps

This form does not need to be submitted to the MDPH with the case report form. It is for LBOH use and is meant as a quick-reference guide to acute hepatitis C case investigation activities. It suggests a sequence of investigation, recommended elements, and the information that should be reviewed with each case. For more information on background and rationale, please refer to the preceding chapter on HCV.

Upon receiving a report of acute HCV infection from a laboratory or a health care provider, please follow the process detailed below:

1.	Contacting the Case's Health Care Provider (Do This First)	
	Attempt to contact the health care provider by phone first.	
	If n	no response after three attempts, send a form via fax or a letter (sample letter is attached in <i>Attachment B</i>).
		If a letter needs to be sent, it should include the following:
		☐ Case's name;
		☐ Description of your responsibility to notify and educate the case;
		☐ Indication that you have been trying to reach the provider;
		☐ Timeline of when you intend to contact the case (unless the provider selects an alternate time);
		☐ That it is strongly preferred that the provider inform the case of her/his diagnosis; and
		☐ Information on how the provider can contact you.
		Include a copy of the MDPH <i>Hepatitis C (Acute) Case Report Form</i> with the fax or letter, and indicate the sections that the provider should fill out.
		Include a self-addressed, stamped envelope in which the case report may be returned.
2.	On	ce You Have Contacted the Case's Health Care Provider
	Exp	plain that the information obtained is strictly confidential, and discuss purpose of surveillance, as necessary.
	Confirm the report and diagnosis.	
☐ Obtain copies of any additional related laboratory reports, including:		tain copies of any additional related laboratory reports, including:
		EIA – HCV antibody (e.g., ELISA);
		Immunoblot assay (e.g., RIBATM, SIA);
		HCV RNA (e.g., RT-PCR, b-DNA); or
		Liver function tests.
		tain as much information for the case report as possible—if the provider refuses to provide risk-related ormation, attempt to get demographic information and laboratory results (listed above).

	Inform the provider that he/she should discuss this report with the case. The provider should inform the case that someone from the LBOH will contact him/her.
	Find out when it will be possible for you to contact the case directly. (How much time does the provider need to contact the case?)
3.	Contacting the Case
	Use the method(s) you normally use to contact the case. This might include attempting to contact the case via phone first. If there is no phone number available or if there is no answer after three tries over at least one week, a home visit can be conducted, if feasible. Alternatively, a letter can be sent to the case's address (sample letter is attached in <i>Attachment C</i>). This letter should be non-specific and should discuss a public health concern that you need to discuss with the case.
	If a letter needs to be sent:
	☐ Send the letter via certified mail.
	Ask in the letter what the best way for you to contact the case would be; then follow the rest of the investigation as indicated below.
	☐ If no contact is made with the case four weeks after having sent the certified letter, please fax or mail all information obtained on the case at that point to MDPH (include a copy of the laboratory results).
4.	Once You Have Contacted the Case
	Explain confidentiality and the purpose of obtaining the requested information to the case.
	Inform the case that the information that will be discussed is highly personal, that it is asked of every person with hepatitis C, and that it is important for our understanding of the infection.
	Ask the case if they have any questions about HCV or surveillance; refer the case to MDPH if they have questions and need additional information.
	Determine if a provider is currently treating the case, and what that provider's specialty is.
	If the case is not currently receiving medical care:
	☐ Suggest that he/she contact a primary care provider for treatment evaluation.
	☐ As necessary, provide a referral to a primary care provider.
	☐ Discuss the benefits of ongoing medical care.
	☐ Discuss the benefits of being assessed by a specialist.
	Review HCV transmission with the case—risks, behaviors, and prevention; use the case report form to guide your discussion.
	If the case is actively injecting drugs, refer to treatment programs and needle exchange programs.
	Discuss the potential for sexual transmission with the case. If the case is concerned about sexual transmission:
	☐ Recommend using a condom to reduce the likelihood of exposing sexual partners to HCV.
	Review proper condom use, as necessary.
	Discuss the risks of alcohol consumption with the case.
	Assess whether the case currently drinks alcohol. If they currently drink alcohol:
	☐ Recommend elimination of any alcohol consumption—refer to alcohol treatment/support, as necessary.

	Recommend that the case discuss any medication use (including alternative/herbal medications) with a provider to ensure that they are not going to damage his/her liver.
	Determine if the case is at risk for either hepatitis A or B. If so, provide referral so that the case may receive vaccines to prevent these infections.
	Fill out the case report form based on your discussion with the case—if there are additional sections for which you require information, query the case directly. Fill in information that was not obtained from the health care provider to the extent possible.
	Provide the case with a fact sheet on HCV and any other relevant materials.
	Provide a phone number for the case to call to get additional information later, if needed.
5.	Reporting to MDPH
	After completing the form, attach laboratory report(s) and fax or mail (in an envelope marked "Confidential") to the MDPH, Bureau of Communicable Disease Control, Office of Integrated Surveillance and Informatics Services (ISIS). The confidential fax number is (617) 983-6813. Call ISIS at (617) 983-6801 to confirm receipt of your fax. The mailing address is:
	MDPH Office of Integrated Surveillance and Informatics Services (ISIS) 305 South Street, 5 th Floor Jamaica Plain, MA 02130
	Call MDPH if there are any questions about reporting, at (617) 983-6800 or (888) 658-2850.